

Amendments to the Claims

Kindly amend claims 1, 8 and 9 as indicated below. Also, please add new claims 17 – 25, presented below.

1. (currently amended) A polymerizable composition comprising:

(a) an aqueous microemulsion comprising one or more ~~hydrophobic~~ hydrophobic monomers, one or more hydrophilic and/or amphiphilic monomers, one or more initiators; and

(b) at least one thickening agent comprising a polymer or copolymer of acrylic acid.

2. The polymerizable composition of claim 1 wherein the thickening agent comprises a polymer of molecular weight between about 200,000 and about 800,000.

B1 3. The polymerizable composition of claim 1 wherein the thickening agent comprises a substantially linear polymer.

4. The polymerizable composition of claim 1 wherein the polymer comprises at least about 20 weight percent acrylic acid monomer.

5. The polymerizable composition of claim 1 wherein the polymer comprises at least about 80 weight percent acrylic acid monomer.

6. The polymerizable composition of claim 1 further comprising one or more water-soluble or water-dispersible additives.

7. The polymerizable composition of claim 6 wherein at least one of the water-soluble or water-dispersible additives is selected from the group consisting of electrolytes, plasticizers, antimicrobial agents, therapeutic agents, and combinations thereof.

8. (currently amended) A pressure sensitive composition comprising a polymerized product of the polymerizable microemulsion composition according to claim 1.

9. (currently amended) A method of forming a polymerized microemulsion pressure sensitive adhesive in contact with a substrate, comprising the steps of:

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- (1) providing an aqueous microemulsion comprising one or more ~~hydrophobic~~ hydrophobic monomers, one or more hydrophilic and/or amphiphilic monomers and one or more initiators;
 - (2) combining the aqueous microemulsion with at least one thickening agent comprising a polymer or copolymer of acrylic acid;
 - (3) coating the thickened microemulsion onto the substrate; and
 - (4) irradiating the microemulsion in order to form the pressure sensitive adhesive in contact with the substrate.

10. The method of claim 9 wherein the thickening agent comprises a polymer of molecular weight between about 200,000 and about 800,000.

11. The method of claim 9 wherein the thickening agent comprises a substantially linear polymer.

12. The method of claim 9 wherein the polymer comprises at least about 20 weight percent acrylic acid monomer.

13. The method of claim 9 wherein the polymer comprises at least about 80 weight percent acrylic acid monomer.

14. The method of claim 9 wherein the irradiation is ultraviolet radiation in the range of 280 nm to 400 nm.

15. (previously amended) A method of forming a polymerized microemulsion pressure sensitive adhesive in contact with a substrate, comprising the steps of:

(1) mixing hydrophilic monomer(s) and/or amphiphilic monomer(s) in a weight percent ratio of from about 100/0 to about 0/100 to form a first mixture;

(2) mixing hydrophobic monomer(s), having a glass transition temperature suitable for forming a hydrophobic pressure sensitive adhesive, into the first mixture in a weight percent ratio of from about 80/20 to about 10/90 hydrophobic monomers/first mixture to form a second mixture;

(3) mixing surfactant(s) into the second mixture in a weight percent ratio of from about 5/95 to about 30/70 surfactant/second mixture to form a third mixture;

(4) mixing initiator(s) into the third mixture in a weight percent ratio of from about 0.01/99.99 to about 2/98 initiator/third mixture to form a fourth mixture,

(5) independently, mixing water and water-soluble or water-dispersible additives together in a weight percent ratio of from about 100/0 to about 80/20 to form an aqueous mixture;

(6) mixing the aqueous mixture and the fourth mixture together in a weight percent ratio of from 5/95 to about 50/50 aqueous mixture/fourth mixture to form a microemulsion;

(7) mixing the microemulsion with a thickening agent comprising a polymer or copolymer of acrylic acid monomer together in a weight ratio of from about 0.5/99.5 to about 5/95 to form a thickened microemulsion;

(8) coating the thickened microemulsion onto the substrate; and

(9) irradiating the microemulsion in order to form the pressure sensitive adhesive in contact with the substrate.

16. The method of claim 15 wherein the water-soluble or water dispersible additives are selected from the group consisting of electrolytes, plasticizers, antimicrobial agents, therapeutic agents, and combinations thereof.

17. (new) A polymerizable composition comprising:

(a) an aqueous microemulsion comprising one or more hydrophobic monomers, one or more hydrophilic and/or amphiphilic monomers, one or more initiators; and

(b) a thickening agent comprising a solution of a polymer or copolymer of acrylic acid.

B1 18. (new) The polymerizable composition of claim 17 wherein the polymer or copolymer comprises at least about 20 weight percent acrylic acid monomer.

19. (new) The polymerizable composition of claim 17 wherein the polymer or copolymer comprises at least about 80 weight percent acrylic acid monomer.

20. (new) The polymerizable composition of claim 17 wherein the thickening agent comprises a polymer or copolymer of molecular weight between about 200,000 and about 800,000.

21. (new) The polymerizable composition of claim 17 wherein the thickening agent comprises polyacrylic acid.

22. (new) The polymerizable composition of claim 21 wherein the polyacrylic acid is of molecular weight between about 200,000 and about 800,000.

23. (new) The polymerizable composition of claim 17 further comprising one or more water-soluble or water-dispersible additives.

24. (new) The polymerizable composition of claim 23 wherein at least one of the water-soluble or water-dispersible additives is selected from the group consisting of electrolytes, plasticizers, antimicrobial agents, therapeutic agents, and combinations thereof.

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25. (new) A pressure sensitive composition comprising a polymerized product of the polymerizable composition of claim 17.
